

Name: **Dr. VIJAYA KUMAR GURRALA**

Designation: Assistant Professor

Department: Electronica and Communication Engineering

Mail.I.D: vijayakumar_g@vnrvjiet.in,vijayakumargurrala@gmail.com

Experience (in years): Teaching:16 Research: 08 Others

(If any, Specify): Nil



1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	2022	ECE
2	M.Tech	2009	DECS
3	B.Tech	2006	ECE

2. Teaching and Learning:

2.1. Teaching Interests: Subjects relate to signal processing and communication.

2.2. Novel Teaching & Learning Techniques adopted:WIT&WIL,POGIL,Active Learning Methods

2.3. Involvement in curriculum updating / Design: Updating the syllabus of various subjects like Signals and Systems, Control Systems, EMTL and AWP

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Watching and Playing CRICKET

3.2. CCA/ECA Organized:Kabaddi in VNRVJIET Sports Fest-2017& 2018.

3.3.CCA/ECAparticipated:Life member of Indian Society for Technical Education(ISTE)

3.4.Counseling and Mentoring Activity: Actively Involving in Counseling and Mentoring.

3.5. Committees involved in:

Department level: Diploma In-charge, NBA, Remedial classes, Dept. Library In-Charge, Project Coordinator

Institute Level: NA

4. Conference / Workshop / Seminar / Guest Lectures:

4.1.Conducted:05

4.2.Attended:20

6. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures: Nil

5.2. Articles/Chapterspublished inBooks: 02

1. G.Vijaya Kumar,Y.Padma Sai, Padmaraju K “Extraction of Wavelet Features for the Classification of Sleep Stages Using Single Channel EEG” Recent Developments in Engineering Research,Book PublisherInternational,Vol-2 .Indexing: Google Scholar

2. Gurrala, V.K., Padma Sai, Y., Karennagari, N., Yashwanth Reddy, K. (2022). Speech Processed Public Addressing System. In: Kumar Jain, P., Nath Singh, Y., Gollapalli, R.P., Singh, S.P. (eds) Advances in Signal Processing and Communication Engineering. Lecture Notes in Electrical Engineering, vol 929. Springer, Singapore. https://doi.org/10.1007/978-981-19-5550-1_21.

5.3. Books published as single author or as editor: Nil

5.4. Projects Guided:

a) UG:19

b) PG:06

5.5. Research Interests: Boi-Medical Signal Processing

5.6. Ph.Dstudents: NA

a) Enrolled:

b) Submitted:

c) Awarded:

5.7. Papers published in reviewed Journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISS N No.	Impact Factor/ Citation Index	National/ International
1	Hand Gesture Recognition Using Accelerometer For Disabled	IJSETR	2278 – 7798	2.753	International
2	Hand Gesture Recognition Using Accelerometer	IJEEC	2048-1069	3.86	International
3	Artifact Removal from Sleep Hipnograms using complete Ensemble Empirical Decomposition with Adaptive Noise	IJST Vol:10, 2017, pp:1-8	0974-6846	IC Impact Factor 5.07	International
4	Wavelet Domain Extraction of Features from single channel Sleep EEG	IJITEE Vol:8, 2019, Issue: 4S2	2278-3075	5.15	International
5	Speech Based Emotion Detection System Using Mfcc	IRJET Vol:07, no: 05,May 2020, pp:4329-4332	2395-0056	7.529	International
6	Automated Irrigation System for Agricultural Crop Field Monitoring using GSM Module and Wireless Network Sensors	IRJET Vol:07, no: 05,May 2020, pp:4333-4337	2395-0056	7.529	International
7	Automation Of Industrial Parameters Using IOT With Raspberry PI	Alochana Chakra Journal Volume IX, Issue IV, April/2020&pp:398 2-3990	2231-3990	6.3	International

8	A machine learning approach to monitor water quality in Aquaculture	International Journal of Performability in Engineering, Volume 16, Issue 12, Dec/2020&pp:1845-1852;	0973-1318	1.2	International
9	A Novel Single Channel EEG based Sleep Stage Classification using SVM	International Journal of Biomedical Engineering and Technology (IJBET) Vol:36, Issue:2, PP:119-132,2021	1752-6426	JCI 0.17 CiteScore 1.9 (2022)	International
10	Detection of Sleep Apnea Based on the Analysis of Sleep Stages Data Using Single Channel EEG	Traitement du Signal, Vol-38, Issue-2, Pg:431-436,2021	0765-0019 (print); 1958-5608 (online)	1.541	International
11	Advanced Deep Learning Model for Sleep Stages Classification Using Single Channel EEG	Design Engineering P:9108–9118 Issue-8 2021	119342.	1.41	International
12	Sleep stage-based sleep disorder detection using single-channel electroencephalogram	International Journal of Nanotechnology Vol:19, Issue: 6-11, Pp:1075-1090 2022	ISSN online 1741-8151 ISSN print 1475-7435	0.346 (5 Year Impact Factor 0.511) JCI 0.05 CiteScore 0.9 (2022)	International

5.8. Papers presented at National / International conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
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1	An Interactive System for Paralysed Patients Based on Eye Blink	IEEE(EDS) Kolkata chapter Sponsored 4th International Conference on Computing, Communication and Sensor Network	International	24-25 Dec 2015
2	Wavelet Domain Extraction of Features from single channel Sleep EEG	International Conference on Advances in Signal Processing, Power, Embedded, Soft Computing, Communication and Control Systems (ICSPECS-2019)	International	11-12 Jan 19
3	A review on analysis of sleep EEG signals	4th International Conference on Electronics, communication, and Aerospace Technology (ICECA), 2020, pp. 289-294.	International	05-07 Nov'2020
4	Infection Segmentation of Leaves Using Deep Learning techniques to enhance crop productivity in smart agriculture	2021 6th International Conference on Signal Processing, Computing and Control (ISPCC)	International	07-09/10/2021
5	Speech Processed Public Addressing System	ICASPACE 2021	International	
6	Artificial Intelligence Based Algorithms for Driver Distraction Detection: A Review	2021 6th International Conference on Signal Processing, Computing and Control (ISPCC)	International	2021/10/7 pp: 383-386
7	Skin pathology detection using artificial intelligence	2021 6th International Conference on Signal Processing, Computing and Control (ISPCC)	International	2021/10/7 Pp:373-376
8	Design Of Area And Power-Optimized Vlsi Architecture Of Aludesign Using Signed Multiplier	2022 International Conference on Recent Trends in Microelectronics, Automation, Computing and	International	PP: 28-30 Dec. 2022

		Communications Systems (ICMACC)		
9	EEG Based Decision Selection System Using Deep Learning	2023 4th International Conference for Emerging Technology (INCET) Belgaum, India.	International	May 26-28, 2023
10	FACE DETECTION IN AN ENHANCED IMAGE	11 th International Conference On “Contemporary Engineering And Technology – 2023” (ICCET – 2023)	International	May 1st – 2nd 2023

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	Development and Implementation of Automated system for the detection of Sleep Disorders and Epilepsy using EEG Analysis	UGC	2017-19	440000	Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6.Awards / Honors received:

- UGC NET qualified in 2011 and 2013
- JNTUH-FET qualified in 2013.
- Got ELITE in NPTEL online certification course in Control Engineering and Machine Learning, Principles of Communication Systems-1, Problem Solving Through Programming In C and Python for Data Science.
- Got ELITE+GOLD in NPTEL online certification course in Principles of Signals and Systems.
- Acted as NPTEL Telugu Translator

7. Motto: Commitment and Hardwork are the steps for the growth.